

Amendments Pursuant to 37 C.F.R. 1.121

IN THE CLAIMS:

Please amend claim 1 - 9 as follows. Claims 1 - 9 remain in the application.

1. (Currently Amended) A coplanar line comprising:

a first rectangular slab~~layer~~, of a vertical multi-layered stack of rectangular slabs, of dielectric material, said first rectangular slab having a first side, a second side and two edges;

a second rectangular slab~~layer~~, of a said vertical multi-layered stack of rectangular slabs of dielectric material, said second rectangular slab having a dielectric constant less than 30, and positioned adjacent and substantially parallel to said second side of said first rectangular slab ~~layer~~ of dielectric material, said second rectangular slab ~~layer~~ of dielectric material having a dielectric constant that is less than the dielectric constant of said first rectangular slab ~~layer~~ of dielectric material;

a first electrode adjacent to said first side of said first rectangular slab of dielectric material and a second electrode adjacent to said second side of said first rectangular slab of dielectric material ~~second electrodes~~ for applying a controllable voltage across said first rectangular slab of dielectric material thereby controlling a dielectric constant of said

first rectangular slab of dielectric material, ~~wherein at least one of said first and second electrodes is positioned between said first and second layers of dielectric material;~~

a conductor positioned adjacent to a first edge of each of said first and second rectangular slabs of dielectric material ~~layers~~; and

first and second ground planes positioned on opposite ends of said conductor.

2. (Currently Amended) A coplanar line as recited in claim 1, further comprising:

means for applying a controllable voltage across said second rectangular slab of dielectric material, thereby controlling the dielectric constant of said second rectangular slab of dielectric material.

3. (Currently Amended) A coplanar line as recited in claim 1, further comprising:

a plurality of additional rectangular slabs of said vertical multi-layered stack of rectangular slabs ~~layers~~ of dielectric material positioned substantially parallel to said first and second rectangular slabs ~~layers~~ of dielectric material, said additional rectangular slabs ~~layers~~ of dielectric material ~~can~~ include at least one layer having a tunable dielectric constant.

4. (Currently Amended) A coplanar line as recited in claim 3, wherein said first, second and additional layers of dielectric material are assembled into a plurality of subassemblies, said subassemblies having the same arrangement of dielectric materials.

5. (Currently Amended) A coplanar line as recited in claim 1, wherein said first rectangular slab layer of dielectric material has dielectric constant greater than about 100 and a loss tangent of less than about 0.01.

6. (Currently Amended) A coplanar line as recited in claim 1, wherein said second rectangular slab layer of dielectric material is selected from the group consisting of a ~~Ba_{1-x}Sr_xTiO₃~~-Ba_{1-x}Sr_xTiO₃ composite where x ranges from zero to one, alumina, mica, and air.

7. (Currently Amended) A coplanar line as recited in claim 1, wherein said first and second rectangular slabs layers of dielectric material is selected from the group consisting of bulk, tape, thick film and thin film layers.

8. (Currently Amended) A coplanar line as recited in claim 1, wherein said first and second rectangular slabs layers of dielectric material each have a thickness less than about one tenth of the wavelength of a radio frequency signal to be transmitted through the coplanar line.

9. (Currently Amended) A coplanar line as recited in claim 1, wherein said first rectangular slab layer of dielectric material is selected from the group consisting of BSTO, BSTO-MgO, ~~BSTO-MgAl₂O₄~~-BSTO-MgAl₂O₄, BSTO-CaTiO₃, BSTO-MgTiO₃ and BSTO-MgSrZrTiO₆.